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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO.  |
|---|-------------|----------------------|---------------------|-------------------|
| 09/070,920  | 05/04/1998  | AKITOSHI YAMADA      | 37B.P48             | 4955              |
| 5514  | 7590        | 05/21/2004           | EXAMINER            |                   |
| FITZPATRICK CELLA HARPER & SCINTO<br>30 ROCKEFELLER PLAZA<br>NEW YORK, NY 10112 |             |                      |                     | BROOKE, MICHAEL S |
|   |             |                      | ART UNIT            | PAPER NUMBER      |
|   |             |                      | 2853                |                   |

DATE MAILED: 05/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                               |                  |
|------------------------------|-------------------------------|------------------|
| <b>Office Action Summary</b> | Application No.               | Applicant(s)     |
|                              | 09/070,920                    | YAMADA ET AL.    |
|                              | Examiner<br>Michael S. Brooke | Art Unit<br>2853 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 27 March 2001.

2a) This action is **FINAL**.                            2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-4,6,7,9-33,35,36,38-62,64,65 and 67-93 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) \_\_\_\_\_ is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) 1-4,6,7,9-33,35,36,38-62,64,65 and 67-93 are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.

5) Notice of Informal Patent Application (PTO-152)

6) Other: \_\_\_\_\_.

## DETAILED ACTION

### *Election/Restrictions*

Restriction to one of the following inventions is required under 35 U.S.C. 121:

1. Claims 1-4, 6, 30-33, 35, 59-62, 64,88 and 89 drawn to a method of controlling a print operation, an apparatus for controlling a print operation, computer executable process steps stored on a computer readable medium and a computer readable medium, classified in class 347, subclass 23.
2. Claims 7, 9, 36, 38, 65, 67 and 90, drawn to a method of controlling a print operation, an apparatus for controlling a print operation, computer executable process steps stored on a computer readable medium and a computer readable medium, classified in class 347, subclass 9.
3. Claims 10-18, 39-47, 68-76 and 91, drawn to a method of controlling a print operation, an apparatus for controlling a print operation, computer executable process steps stored on a computer readable medium and a computer readable medium, classified in class 347, subclass 14.
4. Claims 19-29, 48-58, 77-87, 92 and 93, drawn to a method of controlling a print operation, an apparatus for controlling a print operation, computer executable process steps stored on a computer readable medium and a computer readable medium, classified in class 347, subclass 23.

The inventions are distinct, each from the other because of the following reasons:

Inventions 1 and 2 are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention 2 has separate utility, such as cooling the print head in between printing operations. See MPEP § 806.05(d).

Inventions 1 and 3 are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention 3 has separate utility, such as determining whether or not a print head cooling operation has been interrupted.

See MPEP § 806.05(d).

Inventions 1 and 4 are not restricted.

Inventions 2 and 3 are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention 3 has separate utility, such as determining whether or not a print head cooling operation has been interrupted.

See MPEP § 806.05(d).

Inventions 2 and 4 are not restricted.

Inventions 3 and 4 are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention 3 has separate utility, such as determining whether or not a print head cooling operation has been interrupted.

See MPEP § 806.05(d).

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and the search required for Group 1 is not required for Group 2, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and the search required for Group 1 is not required for Group 3, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and the search required for Group 2 is not required for Group 3, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and the search required for Group 3 is not required for Group 4, restriction for examination purposes as indicated is proper.

This application contains claims directed to the following patentably distinct species of the claimed invention:

They present invention teaches several distinct sub-species directed to how the parameter is obtained and to when the predetermined process occurs. These sub-species are identified as follows:

**How parameter is obtained**

1A: Parameter is obtained by calculation.

2A: Parameter is obtained by measurement.

**When the predetermined process occurs**

1B: Occurs in next print job.

2B: Occurs at next power-on.

3B: Occurs at end of current print job.

The Applicant must select a single species for examination by selecting a single sub-species from each group (e.g., 1A and 1B).

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claim is generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement is traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael S. Brooke whose telephone number is (571) 272-2142. The examiner can normally be reached on Flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michael S. Brooke  
Examiner  
Art Unit 2853

MSB  
05/17/04